### JC20 Rec'd PCT/PTO 01 JUL 2005

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

App. No. : (Nat'l. Stage of PCT/JP2003/016493)

Applicant : Akihiko Namba, et al.
Filed : On even date herewith

Tech. Cntr./Art Unit : (To be assigned)
Examiner : (To be assigned)

Docket No. : 39.050 Customer No. : 29453

Honorable Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### INFORMATION DISCLOSURE STATEMENT

Sir:

This constitutes an Information Disclosure Statement pursuant to 37 C.F.R. §§ 1.97 and 1.98. The documents listed on the accompanying Form PTO/SB/08A are hereby brought to the Examiner's attention in the patent application identified above.

#### REMARKS

Cite Nos. F1 through F4 and O1 through O3, as listed on Form PTO/SB/08A, were cited in the International Search Report for PCT/JP2003/016493, of which the presently submitted patent application is to be the National Stage. Among these, Cite Nos. F1 through F4 are not in English.

Furthermore, Cite Nos. F5 through F8 are not in English either.

## Concise Explanation of Relevance/Copy of Translation Pursuant to 37 C.F.R. § 1.98(a)(3)

As a concise explanation of the relevance of Cite Nos. F1 through F4, a copy of the International Search Report in English accompanies this paper.

Nat'l. Stage of Int'l. App. No. PCT/JP2003/016493 **IDS Submission** 

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Cite No. F5 is mentioned in the paragraph that begins in line 8 on page 5 in the Background Art section of the present specification. The relevance of Cite Nos. F6 through F8 is discussed in the paragraph that begins in line 15 on page 4 therein.

Furthermore, English abstracts of Cite Nos. F1 through F8 are available on the Japanese Patent Office website through Patent Abstracts of Japan, and a copy of the corresponding abstract is attached to the back of each reference.

The Examiner is respectfully requested to consider these references, to indicate so on the accompanying Form PTO/SB/08A, and to make the document of record in the present application.

Respectfully submitted,

Date: June 29, '05

James W. Judge

Registration No. 42,701

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Nati Stage of PCT/JP2003/016493 Substitute for form 1449/PTO Application Number Filing Date December 22, 2003 [371(c) date] INFORMATION DISCLOSURE First Named Inventor Akihiko Namba STATEMENT BY APPLICANT Art Unit (To be assigned)

(Use as many sheets as necessary)

**Examiner Name** (To be assigned) Attorney Docket Number 39.050 Sheet

|                       |                          |  | U. S. PATENT D                 |  |  |
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| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number  Number-Kind Code <sup>2 (# known)</sup> | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document                                     | Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear |
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|                       | FOREIGN PATENT DOCUMENTS |   |                     |  |   |                |  |  |  |  |
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| Examiner<br>Initials* | Cite<br>No.1             | Foreign Patent Document   | Publication<br>Date | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages |                |  |  |  |  |
|                       |                          | Country Code <sup>3 -</sup> Number <sup>4 -</sup> Kind Code <sup>6</sup> (if known) | MM-DD-YYYY          |  | Or Relevant Figures Appear                        | T <sub>e</sub> |  |  |  |  |
|                       | F1                       | JP-2001-064094-A  | 03-13-2001          | Sharp  |   | ~              |  |  |  |  |
|                       | F2                       | JP-2000-272994-A  | 10-03-2000          | Sharp  |   | 1              |  |  |  |  |
|                       | F3                       | JP-H11-214321-A   | 08-06-1999          | Sumitomo Electric                                  |   | V              |  |  |  |  |
|                       | F4                       | JP-H07-106266-A   | 04-21-1995          | Sony   |   | ~              |  |  |  |  |
|                       | F5                       | JP-H06-166594-A   | 06-14-1994          | De Beers   |   | ~              |  |  |  |  |
|                       | F6                       | JP-H11-100296-A   | 04-13-1999          | Sharp  |   | 1              |  |  |  |  |

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|        |                         |             |                                       | Application Number     | lust Stage of PC 1/192603/016493 |  |  |
| INIE   | FORMATION               | ı Die       | CLOSUDE                               | Filing Date            | December 22, 2003 [371(c) date]  |  |  |
|        |                         |             |                                       | First Named Inventor   | Akihiko Namba                    |  |  |
| ST     | ATEMENT                 |             |                                       | Art Unit               | (To be assigned)                 |  |  |
|        | (Use as many sh         | eets as n   | ecessary)                             | Examiner Name          | (To be assigned)                 |  |  |
| Sheet  | 2                       | of          | 3                                     | Attorney Docket Number | 39.050                           |  |  |

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|-------------|------|-----------------|---|--|-----------------------------|---|
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|                       |              | Country Code <sup>3 -</sup> Number <sup>4 -</sup> Kind Code <sup>5</sup> (if known) | MM-DD-YYYY |                     | Or Relevant Figures Appear | T <sup>6</sup> |  |  |                         |                  |  |   |  |
|                       | F7           | JP-H05-024991-A   | 02-02-1993 | Matsushita Electric |                            | ~              |  |  |                         |                  |  |   |  |
|                       | F8           | JP-H06-048715-A   | 02-22-1994 | Matsushita Electric |                            | ~              |  |  |                         |                  |  |   |  |
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| INFO       | ORMATION             | I DIS     | CLOSURE   | Filing Date            | December 22, 2003 [371(c) date] |  |  |
| STA        | TEMENT E             | BY A      | PPLICANT  | First Named Inventor   | Akihiko Namba                   |  |  |
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|                       | 01                       | G. Popovici, et al., "Prospective n-type impurities and methods of diamond doping," Diamond and Related Materials, Vol. 4, 1995, pp. 1305-1310  |                |
|                       | 02                       | S. A. Kajihara, et al., "Nitrogen and Potential n-Type Dopants in Diamond," Physical Review Letters, Vol. 66, No. 15, 15 Apr 1991, pp. 2010-2013  |                |
|                       | О3                       | R. Kalish, "The search for donors in diamond," Diamond and Related Materials," Vol. 10, 2001, pp. 1749-1755   |                |
|                       | 04                       | J. F. Prins, "Activation of boron-dopant atoms in ion-implanted diamonds," Physical Review B, Vol. 38, No. 8, 15 September 1988, pp. 5576-5584  |                |
|                       | O5                       | F. Fontaine, et al., "Boron implantation/in situ annealing procedure for optimal p-type properties of diamond," Appl. Phys. Lett., Vol. 68, No. 16, 15 April 1996, pp. 2264-2266  |                |
|                       | O6                       | J. F. Prins, "Towards improving the quality of semiconduting diamond layers doped with large atoms," Diamond and Related Materials, Vol. 8, 1999, pp. 1635-1641   |                |
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